



# HAMILTON, BROOK, SMITH & REYNOLDS, P.C.

1645

## POWER OF ATTORNEY OR AUTHORIZATION OF AGENT AND CORRESPONDENCE ADDRESS

Application Number	10/077,178
Filing Date	February 15, 2002
First Named Inventor	Chang-Zheng Chen
Group Art Unit	1645
Examiner Name	Not Yet Assigned
Attorney Docket Number	0399.2027-001

Title Stem Cell Self-Renewal and Lineage Commitment

I/We hereby appoint

[X] the attorneys/agents associated with Customer No. 021005

[ ] Practitioner(s) named below:

as my/our attorneys/agents to prosecute the application identified above, and to transact all business in the United States Patent and Trademark Office connected therewith.

The correspondence address for the above-identified application is:

[X] Customer Number 021005

Hamilton, Brook, Smith & Reynolds, P.C.  
530 Virginia Road  
P.O. Box 9133  
Concord, Massachusetts 01742-9133

[ ] Other \_\_\_\_\_

Please direct all telephone calls and facsimiles to:

Name Anne J. Collins, Esq. Tel. No. 978-341-0036 Fax No. 978-341-0136

I am the:

[ ] Applicant/Inventor.

[X] Authorized representative of the Assignee of the entire interest. See 37 C.F.R. 3.71. A Statement under 37 C.F.R. §3.73(b) is enclosed.

[ ] Authorized representative of an assignee together with [ ] of the entire interest. A separate Statement under 37 C.F.R. § 3.73(b) is enclosed.

### SIGNATURE of Applicant or Assignee of Record

Name Patricia Granahan, Esq.

Signature Patricia Granahan

Date July 29, 2002

[X] Total of [ 1 ] form(s) is/are submitted.



Docket No. 0399.2027-001

STATEMENT UNDER 37 C.F.R. § 3.73(b)

Applicant(s): Chang-Zheng Chen and Harvey F. Lodish  
Application No.: 10/077,178 Filed: February 15, 2002  
For: Stem Cell Self-Renewal and Lineage Commitment

Whitehead Institute for Biomedical Research, a corporation  
(Name of Assignee) (Type of Assignee, e.g., corporation, partnership, university, government agency, etc.)

states that it is

A.  the assignee of the entire right, title and interest in the patent application identified above; or  
B.  an assignee together with [ ] of the entire right, title and interest in the patent application identified above. A separate Statement under 37 CFR § 3.73(b) is being submitted.

The right, title and interest of the above-named assignee in the patent application identified above is established by virtue of:

A.  An assignment from the inventor(s) of the patent application identified above. The assignment was recorded in the Patent and Trademark Office at Reel \_\_\_\_\_, Frame \_\_\_\_\_, or a copy thereof is attached.

OR

B.  A chain of title from the inventor(s) of the patent application identified above, to the current assignee as shown below:

1. From: \_\_\_\_\_ To: \_\_\_\_\_  
The document was recorded in the Patent and Trademark Office at  
Reel \_\_\_\_\_, Frame \_\_\_\_\_, or a copy thereof is attached.
2. From: \_\_\_\_\_ To: \_\_\_\_\_  
The document was recorded in the Patent and Trademark Office at  
Reel \_\_\_\_\_, Frame \_\_\_\_\_, or a copy thereof is attached.
3. From: \_\_\_\_\_ To: \_\_\_\_\_  
The document was recorded in the Patent and Trademark Office at  
Reel \_\_\_\_\_, Frame \_\_\_\_\_, or a copy thereof is attached.

[ ] Additional documents in the chain of title are listed on a supplemental sheet.

The undersigned (whose title is supplied below) is authorized to act on behalf of the assignee.

Date: Pat July 29, 2002

Name: Patricia Granahan

Title: Patent Counsel

Signature: Patricia Granahan

Joint

ASSIGNMENT

WHEREAS, we, **Chang-Zheng Chen and Harvey F. Lodish**, have invented a certain improvement in **STEM CELL SELF-RENEWAL AND LINEAGE COMMITMENT** described in an application for Letters Patent of the United States, the specification of which:

[ ] is being executed on even date herewith and is about to be filed in the United States Patent Office;

[X] was filed on **February 15, 2002** as Provisional Application No. **10/077,178**;

[ ] was patented under U.S. Patent No. [ ] on [ ].

WHEREAS, **Whitehead Institute for Biomedical Research** (hereinafter "ASSIGNEE"), a corporation organized and existing under the laws of the **State of Delaware**, and having a usual place of business at **Nine Cambridge Center, Cambridge, Massachusetts 02142** desires to acquire an interest therein in accordance with agreements duly entered into with us;

NOW, THEREFORE, to all whom it may concern be it known that for and in consideration of said agreements and of other good and valuable consideration, the receipt of which is hereby acknowledged, we have sold, assigned and transferred and by these presents do hereby sell, assign and transfer unto said ASSIGNEE, its successors, assigns and legal representatives, the entire right, title and interest in and throughout the United States of America, its territories and all foreign countries, in and to said invention as described in said application, together with the entire right, title and interest in and to said application and such Letters Patent as may issue thereon; said invention, application and Letters Patent to be held and enjoyed by said ASSIGNEE for its own use and behalf and for its successors, assigns and legal representatives, to the full end of the term for which said Letters Patent may be granted as fully and entirely as the same would have been held by us had this assignment and sale not been made; we hereby convey all rights arising under or pursuant to any and all international agreements, treaties or laws relating to the protection of industrial property by filing any such applications for Letters Patent. We hereby acknowledge that this assignment, being of the entire right, title and interest in and to said invention, carries with it the right in ASSIGNEE to apply for and obtain from competent authorities in all countries of the world any and all Letters Patent by attorneys and agents of ASSIGNEE's selection and the right to procure the grant of all such Letters Patent to ASSIGNEE for its own name as assignee of the entire right, title and interest therein;

AND, we hereby further agree for ourselves and our executors and administrators to execute upon request any other lawful documents and likewise to perform any other lawful acts which may be deemed necessary to secure fully the aforesaid invention to said ASSIGNEE, its successors, assigns and legal representatives, but at its or their expense and charges, including the execution of applications for patents in foreign countries, and the execution of substitution, reissue, divisional or continuation applications and preliminary or other statements and the giving of testimony in any interference or other proceeding in which said invention or any application or patent directed thereto may be involved;

AND, we do hereby authorize and request the Commissioner of Patents of the United States to issue such Letters Patent as shall be granted upon said application or applications based thereon to said ASSIGNEE, its successors, assigns, and legal representatives.

IN TESTIMONY WHEREOF, we have hereunto set our hands and affixed our seals the date set forth below.

Inventor's Signature:



Chang-Zheng Chen

State/Commonwealth

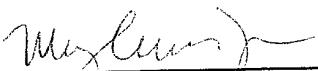
of MASSACHUSETTS

County of MIDDLESEX

Then personally appeared before me the above-named **Chang-Zheng Chen** and acknowledged that he/she executed the foregoing instrument as his/her free act and deed this

20<sup>th</sup> day of MARCH, 2002, 2062.

(SEAL)



Notary Public

Notary Public Commonwealth of Massachusetts

(print name)

My Commission expires 5/30/2008

Inventor's Signature:



Harvey F. Lodish

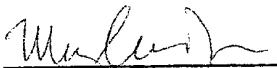
State/Commonwealth

of MASSACHUSETTS

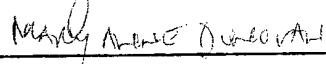
County of MIDDLESEX

Then personally appeared before me the above-named **Harvey F. Lodish** and acknowledged that he/she executed the foregoing instrument as his/her free act and deed this 28th day of MAY, 2002.

(SEAL)



Notary Public



(print name)

My Commission expires 5 / 30 / 2012